

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-25. (Canceled)

26. (New) An apparatus for manufacturing photomask blanks comprising:

a sputtering chamber, wherein only one substrate at a time is introduced therein for forming a film on said substrate;

a load lock chamber for placing said substrate on standby prior to introduction to said sputtering chamber, wherein said load lock chamber is able to draw a vacuum to a predetermined chamber pressure each time before said substrate is introduced into said sputtering chamber;

an unload lock chamber for placing said substrate upon exit from said sputtering chamber;
and

a substrate conveying means for introducing a substrate one by one continuously at a constant interval from said load lock chamber to said sputtering chamber, and from said sputtering chamber to said unload lock chamber.

27. (New) An apparatus for manufacturing photomask blanks comprising:

a substrate holder for holding a square shaped substrate, said holder having a rotation mechanism; and

a target placed in an opposed position with a center axis of said target deviating from a center axis of said substrate held by said substrate holder.

28. (New) An apparatus according to claim 27, wherein the target is placed so that the opposed surfaces of the target and the substrate form a predetermined angle therebetween.

29. (New) An apparatus according to claim 27, further comprising:

means for detecting a rotation position of the substrate; and

means for turning OFF the electric discharge to finish film formation when the substrate has completed an integral number of rotations from the position when turning ON the electric discharge to start film formation, so as to finish film formation at the position of the same rotation angle as the starting position of the film formation.